





# Proceedings Lessons Learnt Workshop on Myanmar Action Plan on Disaster Risk Reduction (MAPDRR) Implementation

8th April 2016

Nay Pyi Taw



Collaboration with



## Contents

Introduction	3
Lessons Learnt Workshop	3
Workshop Sessions	4
1. Opening Session	4
1.1. Opening Address by Ministry of Social Welfare, Relief and Resettlement (MSWRR)	4
1.2. Remarks by UNDP	5
2. Presentations	6
2.1. History of MAPDRR by Relief and Resettlement Department (RRD)	6
2.2. MAPDRR Stocktaking	10
2.3. Questions and Answers	13
2.4. Reflections from MAPDRR Implementation	15
2.4.1. Reflections from Relief and Resettlement Department	15
2.4.2. Reflections from Department of Meteorology and Hydrology	16
2.4.3. Reflections from General Administration Department- Laputta	18
2.4.4. Reflections from Relief and Resettlement Department- Sittwe	20
3. Group Discussions	21
3.1. Group Presentations	22
3.1.1. Working Group 1: Hazard, Vulnerability Assessment and Early Warning	22
3.1.2. Working Group 2: Policy, Institutional Arrangements, Preparedness and Response	23
3.1.3. Working Group 3: Mainstreaming Disaster Risk Reduction into Development	24
3.1.4. Working Group 4: Community Based Disaster Risk Management, Public Awareness,	
Education and Training	25
3.2. Questions and Answers	26
3.3. Way Forward	27
4. Closing Remarks by Relief and Resettlement Department	28

## LESSONS LEARNT WORKSHOP ON MYANMAR ACTION PLAN FOR DISASTER RISK REDUCTION (MAPDRR) IMPLEMENTATION

## **Introduction**

Myanmar Action Plan on Disaster Risk Reduction (MAPDRR) was developed in 2009 with the goal 'to make Myanmar safer and more resilient against natural hazards, thus protecting lives, livelihood and developmental gains'. It has 7 components comprising of 65 priority projects/ sub-components which align with the priorities of Hyogo Framework for Action (HFA) Priorities and the ASEAN Agreement on Disaster Management and Emergency Response (AADMER). Since its inception in 2009, MAPDRR has been drawn on as a national framework on disaster risk reduction. Governmental departments and development agencies refer to it when formulating disaster risk reduction and development programmes and implemented various components of MAPDRR related projects at national and sub-national levels.

In June 2013, the Government enacted the Disaster Management Law (2013) and subsequently the Rules under the Disaster Management Law in April 2015. At the global level, the Sendai Framework for Disaster Risk Reduction (2015-2030) was adopted by UN Member States on 18 March 2015 at the Third United Nations World Conference on Disaster Risk Reduction (WCDR). As the first major agreement of the Post-2015 development agenda Sendai Framework has seven targets and four priorities for action. Further 2030 Agenda for Sustainable Development with 17 Sustainable Development Goals (SDGs) was adapted, during the UN summit in September 2015 and Paris Agreement on Climate Change (COP21) in December 2015. At the regional level, ASEAN Committee on Disaster Management is in the process of finalizing the AADMER Work Programme (2016-2020) supporting the ASEAN 2025: Forging Ahead Together and ASEAN Vision 2025 on Disaster Management.

Over these years, disaster risk reduction (DRR) context in Myanmar has also changed. Pre-existing hazards, increased by socio-economic factors, pressure of urbanization and industrialization and the impact of climate change, have exacerbated vulnerabilities of Myanmar and its communities to natural disasters. As a consequence of this reality, the country has been experiencing more frequent and localized disasters and more recently the devastating floods and landslides during June -August 2015. In this context and in line with Myanmar's priorities and commitments at regional/international levels (e.g. AADMER and Sendai Framework), there is a need to review and update the MAPDDR accordingly and set forth a roadmap for its implementation to strengthen community resilience to disaster.

As a first step, the Ministry of Social Welfare, Relief and Resettlement (MSWRR) together with the Policy Technical Task Force under Disaster Risk Reduction Working Group (DRRWG) have initiated the stocktaking process in the country to assess MAPDRR implementation.

## Lessons Learnt Workshop

The Lessons Learnt Workshop on MAPDRR Implementation, organized by the Ministry of Social Welfare, Relief and Resettlement, the Relief and Resettlement Department (RRD) in collaboration with United Nations Development Programme (UNDP) and the Disaster Risk Reduction Working Group, was organized on 8thApril 2016 at the Royal Ace Hotel, Nay Pyi Taw. The objectives of the workshop were to:

- 1. present the summary of findings from MAPDRR stock taking exercise and discuss and present the challenges and recommendations from the implementation of MAPDRR; and
- 2. seek inputs on the development of report on lessons Learnt on MAPDRR implementation and recommendations for MAPDRR revision.

<sup>&</sup>lt;sup>11</sup> The Policy Task Force under DRRWG is led by United Nations Development Programme (UNDP-Myanmar) and its members include ActionAid, ADPC, American Red Cross, JICA, MRCS, Malteser, MPN, Plan Myanmar, UNICEF, UN-Habitat and UNOCHA.

LESSONS LEARNT WORKSHOP ON MYANMAR ACTION PLAN FOR DISASTER RISK REDUCTION (MAPDRR) IMPLEMENTATION

82 participants;45 from government agencies (officials from central government departments and administrators from state and regional government bodies) and 37 from non-government agencies (DRRWG and development partners) attended the meeting. The agenda of the workshop (Annex 1) and the list of participants (Annex 2) are provided as part of the proceedings.

## Workshop Sessions

1. Opening Session

## 1.1. Opening Address by Ministry of Social Welfare, Relief and Resettlement (MSWRR)

U Win Htut Oo, Deputy Director General of the Relief and Resettlement Department, delivered the opening address on behalf of the Ministry of Social Welfare, Relief and Resettlement.



At the outset the Deputy Director General expressed his gratitude to the participants joining the workshop regardless of their busy schedule. He reiterated that, MAPRR was formulated and developed based on the policies and structures of the government agencies and departments at that time. Thus, the primary aim of the workshop, was to assess the up-to-date progress of MAPDRR implementation of each agency and department and identify the next steps for its advancement.

He mentioned that it was not that only the institutional structure of the government had been transformed. The key reference documents: Hyogo Framework for Action (HFA) 2005-2015 and ASEAN Agreement on Disaster Management and Emergency Response (AADMER), had also reached their assigned time limit. In March 2015, the UN led International Conference on Disaster Risk Reduction, organized in Sendai, Japan, produced the new Sendai Framework for a period of2015-2030. Hence, there was a need to keep up with these changes and revise the plan accordingly.

Moreover, he was concerned that Myanmar is a country susceptible to disasters and climate change impacts. Currently the country faced the consequential effects of the El Niño phenomenon like increased fire accidents and shortage of drinking water. Unless adequate preparedness actions were in place, the nation would experience devastating losses and damages when disasters occurred. The components of Sendai Framework, endorsed by all UN member countries, were based on the implementation experiences of HFA. To realize and evaluate the implementation of Sendai Framework, seven global targets were provided. One of the targets focused on 'substantially increasing the number of countries with national and local

disaster risk reduction strategies'. Therefore, implementing the plan (MAPDRR) could be deemed towards realizing the Sendai Framework.

He also mentioned that it was possible to successfully draft and produce MAPDRR before because various departments who were present here today provided suggestions and invested time to discuss. For those participants who had never attended MAPDRR events, they could observe and learn from the suggestions and discussions and he requested them to participate in the future MAPDRR events. DDG reminded those agencies which had not shared the information, to submit the necessary data at today's workshop. Furthermore, he encouraged everyone to actively partake in the afternoon discussions. Since this workshop was held at the time of Myanmar new year, he envisioned it would help generate new thoughts and ideas. He hoped that with new beings and new outlooks, everyone would be able to take on their respective duties and responsibilities successfully and cheerfully.

## 1.2. Remarks by UNDP

Daw Lat Lat Aye, Team Leader of Pillar II, UNDP, delivered her remarks. Firstly, she thanked the participants, on behalf of UNDP and DRRWG and stated that MAPDRR, first conceptualized and born in 2008, was drafted in line with the situations at the national and state/regional levels, global frameworks and agreements and it would not be wrong to claim MAPDRR was one of the first of its kind in Myanmar. MAPDRR was, above all, the primary plan developed through comprehensive consultative process and officials from various government departments sat down together in working groups and deliberated what should be done. The initial two-year period, as ADPC supported the Ministry to develop the Plan, oversaw a number of deliberations and discussions that generated the ownership and the participation of the departments. In 2012, MAPDRR was approved and endorsed by the Cabinet through the efforts of MSWRR.



She noted that MAPDRR served as a guide for UN and other international agencies as well as government departments in their pursual of reducing disaster risks. MAPDRR was a key reference document in the formulation of DRR projects and activities and it was beneficial to all.

She said that for any planning activity, nothing was cast in stone nor could be considered forever rightful. At a certain point in time, it needed reviewing and evaluating, adjustments carried out as required. For MAPDRR it was time to determine whether it necessitated such reviewing. Global changes were taking

place and so too in Myanmar, social, economic and politically changes were happening. Furthermore, there were climate change impacts triggering further changes in the disaster risks. If risks that prevailed four or five years ago were compared with the risks today, it would be different. Consequently, the plans and strategies also needed altering.

She pointed out one undeniable fact that disasters had become more frequent with increased intensity. The risks had become greater. With the changes occurring in political arena and government structure, this was the right time to come together and make necessary changes (to MAPDRR) with new outlooks and new energy.

She then underlined the foundation for developing global and regional frameworks: to serve the common interest to collectively minimize the disaster risks and the climate change impacts. She mentioned the endorsement of Sendai Framework at the global level replacing HFA and Sustainable Development Goals in place of Millennium Development Goals are important aspects. Since they reflected the changes at the global level, the review and revision at national level in Myanmar also needed to ponder them. It was hoped that international agencies and civil society organizations working in the country would collaborate with the government in that process.

This was also the time the private sector bodies, development partners and donor agencies were observing and readying themselves to work closely with the new government in their undertakings. In the process of reviewing and improving MAPDRR, if MSWRR could strategically capitalize upon the interests shown by these organizations and could seek the opportunities presented, implementation gaps of MAPDRR could be overcome. Private and business sector could increase their investments under their corporate social responsibilities to give back to the populace. Under these circumstances the role of the ministry (MSWRR) would be vital and instrumental.

She reinstated that today was the first step towards reviewing MAPDRR. For those who had taken part before in the MAPDRR process, they could share their experiences and views and the ones who were not there at the previous occasions, their roles in serving the countries, their knowledge on disaster risks and governance and their cooperation in this workshop were equally important. She urged the participants to discuss frankly and freely and invited them to suggest whether there was a need for MAPDRR II and if so to recommend essential improvements. She concluded by thanking and wishing everyone to have a good workshop and the New Year.

### 2. Presentations

## 2.1. History of MAPDRR by Relief and Resettlement Department (RRD)



The presentation on MAPDRR and its formulation process was made by Daw Myat Moe Thwe, Deputy Director, RRD. The presentation was divided into four parts: (i) history of MAPDRR development, (ii) the structure of MAPDRR (its components and sub-components), (iii) the progress of MAPDRR implementation and (iv) linkage between MAPDRR and Sendai Framework 2015-2030.

### History of MAPDRR Development

As presented this morning by UNDP, 2008 Nargis could irrefutably be termed a wake-up call for Myanmar. From 2008 Nargis recovery works, one lesson Learnt was to realize, at the decision maker level also, that a systematically developed, written and approved guideline or action plan was required.

MAPDRR was put into shape from 2009 onwards with the constitution of taskforce and working groups. Twenty-four (24) organizations, that included government departments, UN agencies and international NGOs, were involved in the said taskforce with RRD as the lead. Altogether six (6) taskforce meetings and four (4) working group meetings were organized. There were four (4) working groups formed. These were all the mechanisms applied at the initial stage of the development of MAPDRR.

She noted that one of the strengths of MAPDRR was that there has been strong collaboration and cooperation among agencies through series of meetings and the partnership was strengthened. Once MAPDRR was drafted, in addition to those responsible for implementation of the plan, officials from decision making levels were also invited for consultation and their views, ideas and inputs were sought. There were a lot of discussions to remove or to add projects and as a result sixteen (16) taskforce meetings were held. MAPDRR was launched officially on 4 June, 2012.

However, this structure was based on the previous government institutional arrangements and some modifications had already been made. For instance, before it was Department of Irrigation but currently it was called Irrigation and Water Utilization Department. Therefore, it was necessary to change titles of the departments. There was also a need to check the presence of certain entities, for example like NCEA, and to update the information. She underlined the essential cooperation of the various departments, such as the attendees of this workshop, to indicate the correct names of the respective departments. There were a lot of things that required modifications.

## The Structure of MAPDRR

The goal of MAPDRR was to make Myanmar safer and more resilient against natural hazards, thus protecting lives, livelihood and developmental gains. It was made up of three main chapters;

- Chapter 1: Disaster Management in Myanmar: described the overall disaster management scenario in the country.
- Chapter 2: MAPDRR Components and Future Disaster Risk Reduction Projects: explained in details the seven (7) components and sixty-five (65) sub-components/projects, providing the background and rationale of each component.
- Chapter 3: Actions to be taken for the Implementation of MAPDRR: talked about how to implement and how to monitor the progress.

MAPDRR served as a national framework but its with seven (7) components which align with the priorities of HFA and the articles under AADMER.

## Progress of MAPDR Implementation by RRD

Of sixty-five (65) projects, RRD was the lead for twenty-three (23) of them. Since DRR was a cross-cutting issue, RRD, was named as a collaborating agency for many other projects. Following projects were discussed during the presentations:

- Sub-component 1.1 (completed): In 2013-2014, RRD had drafted and enacted Disaster Management Law and Disaster Management Rules.
- Sub-component 1.2 (on-going): Enhancement of DRR mandates of Ministries and Departments, RRD assisted in mainstreaming DRR into every ministry and department development agenda.
- Sub-component 1.3 (on-going): Updation and dissemination of Standing Order, RRD had organized many meetings on this subject. It had not been finalized but awaiting to be updated in accordance with the institutional changes under the new government.

- Sub-component 1.4 (on-going): Strengthening and capacity building of disaster management focal points in each ministry and region/state, district, township disaster preparedness committees, trainings had been delivered constantly.
- Sub-component 2.1 (on-going): Vulnerability and risk assessment at various levels, RRD was not able to implement it nation-wide but with the support of UNDP and ADPC, there were multi-hazard risk assessments done in 2009 in Ayeyarwaddy and Rakhine regions.
- Sub-component 3.2 (on-going): Multi-hazard End-to-End Early Warning dissemination system, in Laputa township in Ayerwaddy, particularly in 3 villages in Hlwa-Sar village tract and in Hle-Khan village tract in Sittwe, Rakhine, equipment had been installed with the help of DMH and GAD and related trainings had been provided.
- Sub-component 4.1 (on-going): Multi-hazard preparedness and response plan for quick deployment of resources, states and regions had their own response and contingency plans and Guidelines had been produced for township level contingency planning together with ADPC.
- Sub-component 4.3 (on-going): Emergency Operation Center, during the last floods, EOC (in Nay Pyi Taw) was able to successfully function in cooperation with national and regional bodies such as ASEAN. Presently, activities had been undertaken to build the capacities of the officials working in EOC as well as in installing more equipment.
- Sub-component 4.4 (on-going): Strengthening emergency support functions, recently district level offices had been opened together with warehouses (for each individual office) as a stand-by arrangement to ensure supplies were delivered immediately. Under the new Minister, arrangements had been made for RRD staffs to dispense the supplies themselves by going directly to the affected areas.
- Sub-component 4.5 (on-going): Review and expansion of rapid response team, RRD did not have a specialized team trained to work as rapid response team but, in 2015, in every state and region, programs were in place to train youth volunteers to impart necessary skills to the public in order to response rapidly when disasters occurred.
- Sub-component 4.6 (on-going): Cyclone Contingency Program for Delta and Coastal Region, contingency plans had been drafted and certain agencies also provided assistance in developing contingency plans in townships and villages of delta and coastal regions.
- Sub-component 6.1 (to be done): National Policy on development of Community Based Disaster Risk Reduction, RRD was still not able to develop national policy on CBDRR but specialized CBDRR trainings had been delivered together with other agencies.
- Sub-component 6.2 (on-going): National Program on Community based Disaster Risk Reduction, CBDRR training to be provided by DM Training Center could be termed a national level activity.
- Sub-component 6.5 (to be done): Micro Finance Schemes, RRD had the plan to produce a book/ a document/a manual on CBDRR best practices. For many CBDRR activities, the department had to rely on CSOs to be able to go to the ground level and work with the community on a grand scale.
- Sub-component 7.1 (on-going): Awareness through the International Day for Disaster Reduction, was observed annually on 13 October with celebrations at the national, state and regional levels. Events such as drills, articles, poems and cartoons competitions were held to capture the attention and participation of the general public and mass participation.
- Sub-component 7.2 (on-going): National Public Awareness Program, RRD was working jointly with UNDP on National Strategy for Public Awareness.
- Sub-component 7.5 (on-going): Expansion Plan for Disaster Management Training, over and above the regular annual courses, RRD had the plan intended to increase the number of course offered by DMTC, the number of participants and its selection process and the type of courses.
- Sub-component 7.7 (on-going): Enhancing Training Capacities, RRD also plan to augment the skills

of the trainers with support from organizations such as ADPC to send master trainers to go abroad and attend short-term trainings.

- Sub-component 7.8 (on-going): Special Awareness Programmes on specialized topics such as climate change. So far RRD had produced and disseminated pamphlets on drought and other hazards such as lightning. Plan was in place to produce these awareness materials in other dialects for marginalized ethnic groups and tribes who were not fluent in Myanmar.
- Sub-component 7.9 (completed): Establishment of Disaster Management Training Center(DMTC) in Hinthada, Ayeyarwaddy region.
- Sub-component 7.10 (to be done): Research and development in disaster risk reduction-Though RRD already had collected numerous data and information regarding this topic, actual execution was still weak.
- Sub-component 7.11 (on-going): Regional Networking and Knowledge Sharing on Disaster Risk Reduction- ASEAN Coordination Center on Humanitarian Assistant (AHA) offered networking courses and RRD regularly sent two participants.

She mentioned that RRD had sent out stocktaking forms to other departments and out of the twenty-four (24) departments contacted, fourteen (14) had responded.

## Linkage between MAPDRR and Sendai Framework

Daw Myat Moe Thwe highlighted that the Sendai Framework, is similar to HFA, had four priority areas. "The first priority 'understanding disaster risk' was also included in HFA. But priority area 2 mentioned disaster risk governance. To reduce the disaster risks, the disaster risks should be managed. The plans and strategies developed (in Myanmar) intended to enable the DRR practitioners to manage these risks. In that sense, they were in line with the framework. The priority 3 focused on investing in disaster risk reduction. The implementation of risk reduction activities under MAPDRR would not be possible without monetary investment and they were not in vain because investment now could drastically reduce the risks and losses in the future. The priority 4 on the other hand was different from HFA. In HFA, disaster preparedness and response were prioritized. In Sendai Framework, built-back-better recovery and rehabilitation were taken into consideration.

Under Sendai Framework, seven (7) Global Targets were also included to monitor the progress of the nations' contribution towards achievements of the Framework. The Targets 5 spelled out to 'substantially increase the number of countries with national and local disaster risk reduction strategies by2020'. Since Myanmar was able to develop DRR strategies, it can safely be said that the country met the target. The current activities of MAPDRR also contributed to another Sendai's target to 'substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030."

## <u>Recommendations</u>

In conclusion, as recommendation for what needed to be done in the coming year, Daw Myat Moe Thwe highlighted the following points:

- To adjust MAPDRR according to the new institutional arrangements title changes, merging of certain departments;
- To discuss and figure out how to implement those projects that had not been initiated yet (due to lack of financial or human resources);
- To brainstorm on how to align with Sendai Framework and Sustainable Development Goals in the development of future projects;
- To revise the MAPDRR taskforce and working group lists;

- To develop Monitoring and Evaluation (M&E) mechanism for MAPDRR implementation: the lack of such mechanism resulted in not being able to monitor the progress regularly. For that, the departments did not know what each was working on until a meeting was called.
- To assign focal person in each department for the next MAPDRR. This would help strengthen the networking (as in MAPDRR development phase) and close partners could be created.

### 2.2. MAPDRR Stocktaking

The presentation on 'Stocktaking of MAPDRR Implementation' was made by Daw Hnin Nwe Win, International Consultant from UNDP. The objective of the stocktaking exercise was 'to evaluate the extent



to which MAPDRR had been consulted, referred to or adopted in the implementation of DRR activities in Myanmar' over six-year period (2009-2015) by government departments and NGOs.

## Methodology Applied

The stocktaking exercise started with the distribution of a prescribed form that contained fifteen (15) questionnaires. The form was circulated to twenty-six (26) government departments and all members of DRR Working Group in April and May 2016. In total sixty-five (65) responses from government departments and forty-nine (49) from DRR Working Group members

were received. One form for one project was requested and some agencies sent back more than one forms: for instance, DMH shared seventeen (17) forms. Some responses came only yesterday and this process was expected to go on for a while longer.

The data obtained was then compiled into excel sheets under various categories namely project name, status, location, etc. Even though it was referred to as MAPDRR implementation, most of the projects could not be linked directly to MAPDRR components as they were not planned nor carried out with the thoughts of executing MAPDRR projects. However, there were connections and it could only be said that so and so project contributed to MAPDRR. There were some that could be claimed as MAPDRR implementation for example RRD's Emergency Operating Center (EOC) or DMH;s early warning activities. Excel sheets were arranged in such a way that filtering of information was possible such as the number of projects contributing to a particular component or sub-component.

Apart from the survey form, the consultant also had bi-lateral meetings with selected government departments including Department of Housing, Environmental Conservation Department, etc., in the past few days (Tuesday to Thursday). Seven (7) departmental meetings were held to collect more in-depth data. The outcomes from these meetings were also included in the findings.

### **Limitations**

In terms of limitations for stocktaking exercise, the first was that it had been undertaken for only over a month: a short period of time, and could not be considered completed. There were still more to do at least for the next few weeks. If it was needed, referral would also have to be made to MIMU's 3W list. Since this exercise only contained 26 government departments and the members of DRRWG, it certainly did not cover the DRR activities nation-wide. The projects reported do not fall neatly under MAPDRR sub-components and for many only linkages could be established.

Moreover, some agencies expressed difficulty in filling the form since their activities could not be termed projects but were regular departmental undertakings. In that case, the departments shared written documents describing their normal actions and were then connected to corresponding MAPDRR component and sub-components. The form also did not capture the financial aspect of the DRR activities/ projects. This piece of information would be of use as baseline in revising the MAPDRR especially in costing the priority activities which might be the extension or replication of previous MAPDRR projects. Nevertheless, with further consultations to be made in the near future, this gap could be filled.

## Preliminary Findings

From the data collected so far, there were twenty-nine (29) completed government DRR activities (encompassing both departmental activities as well as projects) and twenty-two (22) completed NGOs' projects from 2009 to 2015. In terms of on-going projects, there were twenty (20) from government sector and twenty-seven (27) from NGOs whereas sixteen (16) projects submitted by government departments did not specify any time line.

For contribution towards MAPDRR's seven (7) components, the substantial numbers of projects and activities resulted from the fact that one project contributed or could be linked to more than one MAPDRR sub-component. The table underneath indicates that linkage.

MAPDRR Component	No. of Contribution Projects/ Activities	Government/ Non-government
1	36	25/11
2	23	13/10
3	36	29/7
4	46	29/18
5	45	34/12
6	43	25/19
7	41	16/25

## Highlights of the Selected Activities

Following projects/ activities were highlighted in the presentation:

- Sub-component 1.1: Development of DM Law DM Law (2013) and DM Rule (2015) enacted.
- *Sub-component 2.1: Vulnerability & Risk Assessment at various levels* Multi-hazard risk assessment carried out in the Delta and Rakhine regions.
- *Sub-component 2.4: Flood Risk Map* Flood hazard maps for Kathar, Kalewa, Mandalay and Hpa-an townships completed.
- *Sub-component 2.7: Seismic Zonation of Myanmar* National level seismic zonation map and maps of major cities Bago, Mandalay, Taungoo, Sagaing, Pyay and Yangon completed by DMH and Myanmar Geoscience Society.
- *Sub-component 3.3: Improved Metrological Observation and Forecasting* Weather radar installed at Kyaukphyu station and 30 Automatic Weather Observation System (AWOS) set up in 30 townships.
- *Sub-component 3.8: Seismic monitoring-* Five new seismic stations established in Yangon, Mandalay, Haka, Kyaingtong and Tamu.
- Sub-component 4.3: Emergency Operation Center EOC set up and operational in Nay Pyi Taw.
- *Sub-component 4.7: Provision of Safe Shelter-* Considerable number of safe shelters (multi-purpose shelters) constructed in Ayeyarwaddy delta and Rakhine region by various agencies.
- Sub-component 5.1: Updating and Enforcement of City Development Committee Law, Township

*Development Committee Law and Building By-laws and Codes of Practices* -Myanmar Building Code developed and final draft completed.

- *Sub-component 5.5: Integration of DRR in Housing Sector* National Housing Development Law and National Housing Policy drafted and safer construction trainings conducted for construction workers.
- *Sub-component 5.6: Integration of DRR in School and Health Facilities* Storm-resistant schools constructed in the Delta and Rakhine.
- Sub-component 6.3: Promoting CBDRR Volunteerism Program in place to promote youth volunteers.
- Sub-component 6.5: Preparedness and Mitigation through Small Grants Program Small grants provided for small scale infrastructure development by different agencies.
- *Sub-component 6.8: Development and Implementation of Community-based NRM Program* in the coastal areas, the communities got supported to regenerate mangrove forest growth
- *Sub-component 7.1: Awareness through IDDR* Celebrations observed at national, regional & community levels.
- *Sub-component 7.3: Awareness through School and School Curriculum* DRR components included in Life Skill subject at all levels (from KG to 10th standard) and Life Skill subject in the process to be made a core subject.
- *Sub-component 7.5: Expansion Plan for DM training*-DM course expanded at all state and regional levels.
- *Sub-component 7.8: Special Awareness Program* Awareness programs on climate change, gender-based violence, inclusive DRR, formulated and implemented.
- Sub-component 7.9: Establishment of DM Training Center DMTC established in Hinthada, Ayeyawaddy Region in 2015.

## **Opportunities created by MPDRR**

Since it was seen as a national level guide of DRR priorities in Myanmar, many donors and international agencies referred to the document to learn where aids and support could be provided. The wish-list of DRR activities in MAPDRR also allowed the implementing agencies to seek outside funding by indicating what was planned. Moreover, as MAPDRR outlined and prioritized the key DRR activities, it offered guidance to agencies on what they can or should do in terms of preparedness and response. Additionally, MAPDRR created mutually beneficial partnerships among and between government and non-government agencies. Even those who did not know before they could get involved in DRR schemes became partners because MAPDRR showed them what they needed to or could do.

### **Implementation Challenges**

On the other hand, in the MAPDRR implementation, several challenges were noted by agencies and are listed below;

- Lack of regulatory support rendering MAPDRR rather redundant as there was no directives or regulations that obligated its use in planning exercises.
- Short-term interest in disaster related matters giving rise to inadequate resources when donors, agencies and public did not continuously support it.
- Unclear description of lead departments/ agencies resulting in confusion over which department under the assigned Ministry would take the lead since MAPDRR only mentioned the Ministry.
- Too specific with regards to activities in MAPDRR making it difficult for agencies to directly affiliate their activities;

- Absence of activity costing causing difficulty for government departments in particular to integrate MAPDRR activities in their departmental plans. Without a specific budget for such activities, they were not permitted to take on such tasks.
- Inadequate resources (no specific DR funds, limited budget, insufficient skill sets, knowledge, equipment and materials) hindering effective implementation of DRR activities;
- Poor coordination among and between agencies resulting in overlaps;

## Weaknesses of MAPDRR

When it comes to MAPDRR itself, the first shortcomings would be weak emphasis on exercise and drills that needed to be organized during normal times. The advantage of conducting such drills and simulation exercises especially at the national level with the involvement of many agencies was to inform the participating organizations as well as the observers their respective roles in an emergency situation. Another shortcoming was the lack of evaluation mechanisms with measurable indicators. The absence of such system made it difficult to evaluate the progress or to measure the achievements. Furthermore, MAPDRR did not sufficiently include cross-cutting issues like climate change, environmental management and the inclusion of most vulnerable groups. These were the themes that needed to be looked into with the shifting focus on risks and vulnerabilities. The last shortcoming identified was that there still were many departments and agencies not familiar with MAPDRR. Thus wider consultations were required for the next step in revising the MAPDRR. The consultant finished the presentation with a request for honest discussions in the afternoon sessions.

## 2.3. Questions and Answers

The representative from the Agriculture Department, U Tun Aung Shein, explained the needs to share information on risk assessment of different hazards because the information would be of great use especially in dispensing compensation in the aftermath of disasters. With such data, these schemes could be systematically implemented in vulnerable areas for new and old settlers alike. Moreover, it would also be helpful if the values of buildings, lands and livestock could be pre-determined during normal times since any rates decided after the properties were destroyed would only be estimation at its best. There could also be unnecessary losses on the part of the owners. Another suggestion was to work out how to improve the



weaknesses of MAPDRR and how to maintain and augment the strength.

He then sought clarifications with regards to the installation of seismic stations: whether any station existed in Nay Pyi Taw and if not what the reasons were. He also inquired about low-cost housing plans for disaster affected population in new settlement areas. He asked whether there was a master plan that took into consideration the potential risks and vulnerabilities in the new area (those who used to live in flood prone area when moved to a higher ground faced water shortage problem) and what kind of precautionary actions were carried out by concerned departments on this matter.

In response to the question on seismic stations, the delegate from Department of Meteorology and Hydrology (DMH) explained that Nay Pyi Taw already had its own seismic station and what was mentioned in the presentation was recently achieved under the project with USAID funding.

U Tun Aung Shein reiterated his questions on the presence of data on the value of properties in disaster prone areas. The consultant did not have that information but pointed out that under MAPDRR, risk insurance was a priority area. U Tin Myint from Planning Department responded that it was difficult to collect such data at the national scale although there was one place that could have similar data: Myanmar Population and Housing Census where census data were gathered jointly with data on housing (housing conditions and amenities in each state and region, district and township). Thus if information on hazard prone states and regions like Ayeyarwaddy, Chin, Karen, Rakhine and Yangon could be pulled out from there, substantial data might be obtained. On the ground it was General Administration Department (GAD) that was dealing directly with the community on DRR issues but to be able to collect and compile detailed data like that would need significant resources (human, financial and time).



Daw Myat Moe Thwe of RRD also added a few points. One department that had been involved and had experiences in insurance and compensation was Fire Service Department. They had methods to calculate the value of a building based on its construction costs and its age. If other departments could adopt such means it would be effective and discussions were already taking place to accomplish that. As for relocation, in many countries environmental impact assessment (EIA) and social impact assessment (SIA) had to be undertaken before any resettlement could take place. In Myanmar, it was not that advanced and MSWRR had no power in giving the direct order. It was mainly up to

the state/regional authorities to choose a suitable location and MSWRR would assist in setting up temporary camps or living arrangements.

The representative from Resettlement section of MSWRR also explained that for Chin regional authority (after 2015 flood and landslide) to carry out essential relocation activities like conducting land surveying, provision of electricity and water supply for relocated families, 1,500 million kyats had been released from National Disaster Management Fund on 17 December 2015. Thus, it would be under the management of the regional authority.

The delegate from CSO, Dr. Khin Maung Win, pointed out other aspects (other than MAPDRR) that also needed tackling. When agencies came to Nay Pyi Taw for workshops and meetings and even after finding out what other agencies were doing, many did not think of what could be done collaboratively. Some analysis could be done to figure out which activity could be initiated and managed on the ground by the community and support could be made available. The reach and awareness of MAPDRR needed to be extended so as to make sure regular DRR activities of concerned agencies contributed to MAPDRR implementation in one way or another. Some guidelines too might be needed to put the agencies on the right track. A regular monitoring system with regular reporting of progress under MAPDRR was also worth looking into.

Most CSOs did not have their own core funds. External funding was what they relied on. CSOs were eager to collaborate with government departments but most of the time CSOs were the ones to initiate the alliance. Therefore, it would help a lot if government departments could raise the awareness on MAPDRR as its principal DRR document and guide others on what was to be done. In that way, they could also take advantage of resources available with CSOs, with the public and with the private sector and much more could be accomplished. He requested the government departments, to provide some pointers and to take the initiatives to work with others. He also drew attention to



the requirement for strategic planning at the township and community levels. Sendai Framework highlighted that fact as well and many agencies were willing to help.

Dr. Htoo Myint Swe from the Ministry of Health suggested having an evaluation procedure that could assess the extent to which MAPDRR, or any other DRR documents in that matter, was consulted in real life events like the recent floods. Likewise, for the alumni of DMC courses, some evaluation should be conducted to see what role they played in these events: in other words to appraise the effectiveness of the courses.

The consultant shared some information gathered from the bi-lateral meetings with regards to relocation. For relocation in Chin state or in any other hazard affected areas, Department of Housing Development had been involved in conducting surveys at the new locations for town and village planning that took account of hazard risks. She agreed with U Tin Myint from Planning Department and Dr. Htoo Myint Swe on the points they discussed and thanked everyone for their contribution to this questions and answers section. Daw Lat Lat Aye of UNDP explained the scope of the workshop: to assess the relevance of MAPDRR rather than evaluate the individual projects. That would be the next step in the process to revise MAPDRR.

## 2.4. Reflections from MAPDRR Implementation

## 2.4.1. Reflections from Relief and Resettlement Department

U Win Htein Kyaw, Director from RRD, shared the experiences and lessons Learnt from the MAPDRR

implementation of RRD. Every country in the world including Myanmar and its ASEAN neighbors had their own disaster risk reduction plans to steer their DRR works. MAPDRR was a national DRR framework for Myanmar under which implementations were carried out to fulfill the DRR needs in the country.

Nargis cyclone of May 2008 was the most destructive disaster in Myanmar. More than 140,000 people perished and houses, properties, crops, agricultural lands, livestock and livelihoods were destroyed. Natural disasters could not be avoided nor stopped. They would still occur no matter what. In Myanmar, each year saw occurrence of different hazards.



There were floods and cyclone but fire hazards accounted for close to 70% of all disasters. There was no city, township nor village that had not experienced fire incidents. In other words, DRR was indispensable.

MAPDRR was developed cooperatively by various departments with the thoughts to counter disasters like Nargis in the future. As important as MAPDRR was, it needed revising to keep abreast of emerging changes and priorities. Various departments oversaw their respective related activities under MAPDRR's 7 components and 65 projects. There certainly would be gaps as well as successes.

Many considered MSWRR and RRD to be lead agency for MAPDRR. MAPDRR should be linked to all ministries and departments and even to every Myanmar citizen. The ministries and departments, as the drivers of national mechanisms, were key actors for MAPDRR.CSOs were not overlooked. He admitted that coordination mechanism was weak. RRD for one had only 400 staffs in the entire country. To conduct regular 3-monthly or 6-monthly assessments to determine strengths and weaknesses in the implementation of priority activities was made more difficult because of poor coordination.

In the execution of DRR activities, 4Rs: reduction, readiness, response and recovery (later rehabilitation and reconstruction) were considered. Thus, whatever DRR activities were to be undertaken, these aspects had to be contemplated. He himself was in charge of EoC where only 4 or 5 staffs were working including an advisor. EoC was able to fulfill its functions: to coordinate with DMH to issue early warnings, to collect donated items (both materials and money) and to conduct assessments when circumstances called for.

Implementing MAPDRR did not confine to just the listed65 projects. There were times when actions were taken because the circumstances called for them. Of twenty-three (23) projects of RRD under MAPDRR, there were ones that were completed, some on-going and some that still required attention. For on-going activities, things to ponder included the determination of implementation mechanism (how), the linkage to Sendai Framework and the linkage to the policies of the newly elected government.

He said that for the upcoming process of MAPDRR revision, the focal persons from ministries and departments as well as NGOs and CSOs could send recommendations, suggestions and their views on the strong and weak points of MAPDRR. Different persons from one department or agency may attend different workshops and meetings on MAPDRR but if they failed to pass on or share information, it would reduce the effectiveness. Hence, it was critical to select capable and knowledgeable persons as ministerial and departmental focal points.

## 2.4.2. Reflections from Department of Meteorology and Hydrology

U Hla Tun, Deputy Director from DMH, presented the experiences and views of DMH. DMH had been involved in disaster management even before of the formulation of MAPDRR. Except fire, DMH's core



functions were closely connected to all kinds of disasters: meteorological and hydrological in nature. However, the advantage of MAPDRR was the chance to show what was needed to be done to donors and partners and to seek their support for implementation.

DMH's projects with external funding were all disaster related and could be fitted under MAPDRR sub-components easily. He listed all the projects of DMH as follows:

- The institutional capacity building project with support from Norwegian Meteorological Institute (2012-2017).
- End-to-end early warning system project

with JICA support and implemented (2013-2017) jointly with RRD, GAD and ADPC.

- Storm forecasting project (2010-2013) with JICA support.
- Disaster risk reduction in coastal regions project implemented together with World Meteorological Organization (WMO) and RIMES (completed in 2013).
- Project on the installation of 1 radar in Kyaukphu (radar installation 90% completed in Yangon and in early stages in Mandalay) and 30 AWS (in place of manual stations) with JICA support.
- Transformation of Urban Management project with support from Asian Development Bank (ADB) and International Center for Water Hazard and Risk Management (ICHARM) (2014-2016).
- Project implemented in partnership with Water Utilization Department.
- Common Alert Protocol project (for both meteorological and hydrological hazards) with support from UNESCAP (up to 2016).
- Simulations and drills in the coastal region with financial support from New Zealand government and implemented together with ADPC (Completed).
- Project on upgrading of water level monitoring system together with RIMES supported by Indian Government.
- Early warning gap assessment social mapping in Taunggu township together with New Zealand Government and ADPC (Completed).
- Standardized Standard Operating Procedure project.
- Upgrading of flow measurement equipment (to replace the manual ones) along rivers and waterways with support from Norwegian Government (Completed).

Hazard maps were completed for certain selected areas though not in detail. But as suggested by U Tun Aung Shein, if detailed information such as population density, number of houses and religious buildings (monastery), etc. could be included, it would be very useful to estimate the loss.

## **Implementation Challenges**

As for challenges, U HlaTun explained that in installing the radar, there was problem with regards to locations. In Yangon, the tower had to be built high because of the high-rise buildings (30 stories) constructed nearby. In replacing the manual stations, some disagreement arose when the manual station located in a hospital compound was not allowed to be changed due to a plan to extend the hospital. The importance of such equipment was lost together with the diminishing interests on disaster risk reduction during normal times. In some places, the rainfall measurement stations usually installed on school and hospital grounds were removed as they were considered nuisance or eyesore. Thus to awareness raising of these issues was still very much needed.

Another challenge was the poor internet connection. Many of DMH activities required good internet connectivity. It was not an issue in Nay Pyi Taw but in remote areas where AWOS stations were located, the transmission of data necessitated reliable internet connections: especially because many equipment (AWS, radar) were controlled from the central office. Lack of essential licensed software and poor computer facilities hampered effective operations. Maintenance of equipment obtained and installed with external funds also was a challenge. For example, the maintenance of a radar could cost up to 50,000 USD and the upkeep of 3 planned radars was raising concerns. All in all, DMH needed equipment (high performance computer, high resolution satellite images, etc.), budget as well as skilled human resources and experiences.

## 2.4.3. Reflections from General Administration Department- Laputta

U Toe ToeTun, Township Administrator from GAD-Laputta or Chairman of Laputta Township Disaster Management Committee, discussed the DRR works in Laputta. Following the meetings on MAPDRR, in 2014, Laputta Township Disaster Management Plan had been drafted with support from JICA and it had been submitted to MSWRR. It had also been presented to Ayeyarwaddy Regional authorities (previous government) and out of 26 townships in the entire region, Laputta township plan was considered the best. The plan contained actions to be taken before, during and after disasters. It was developed in consultation with government departments, NGOs and CSOs working in the township and at the same time, keeping in mind various hazards the township had faced.



Laputta was one of the most disaster prone townships in Ayeyarwaddy region. It had plenty of rivers and waterways and was located along four (4) rivers (Ayeyarwaddy, Pyan-hlwar, Yway, Thet-ke-thaung). During 2008 Nargis cyclone, Laputtawas one of the most affected townships. Of 140,000 deaths and missing, about 80,000 could be accounted for from Laputta alone. After Nargis, the Disaster Management Committee had to establish a new and safer Laputta town which was officially opened on 1 March 2016. Before, Laputta townships had seventy-seven (77) wards, villages and village tracts. With the newly established town which consisted

of four (4) wards, it currently had eighty-one (81) wards, villages and village tracts. Furthermore, Laputta township was situated only 2 feet above sea level and that made it more vulnerable.

The Township Disaster Management Committee had thirteen (13) sub-committees; each of which was made up of government officials from relevant departments. In collaboration with JICA and Myanmar Engineering Society (MES), trainings had been conducted for these sub-committees: trainings for members of Township Disaster Management Committee and trainings for Staff Officers at the village and village tract levels who in turn delivered multiplier trainings on the ground.

In the past year, two DRR activity centers had been established in Laputta: one at the High School No. 2 in Laputta town and another at the High School ina village. On a country-wide scale there was one more in Kun-gyan-kone, Yangon Region. The activity centers could help strengthen the DRR knowledge of the students. In terms of cyclone shelters, eighty-one (81) cyclone shelters had been constructed with support from NGOs, CSOs and other government partner agencies. They served as multi-purpose buildings.

Coming 2ndMay would be eight anniversary of Nargis Cyclone. Every year, that day was commemorated by organizing some courses jointly among GAD, RRD, DMH, Fire Services Department and Myanmar Red Cross Society (MRCS) with support from JICA, MES and UNHABITAT. It offered lectures such as cyclone resistant construction by MES. Simulations and exercises were also conducted. Under Laputta township, village level disaster management plans as well as hazard maps indicating locations of safe areas had been prepared. Over the past two years four (4) drills had been held. In addition, before May, GAD in conjunction with other departments and agencies always travelled to villages to prepare for the upcoming rainy season.

During the last major floods (2015 floods), many expressed concerned over Laputta. As a township that located on four big rivers, it was spared any major damages because water from upstream just flowed into these rivers and waterways and did no harm to the township. Nevertheless, preparedness had been in place in all villages situated along the rivers and waterways. Public talks were held, warnings were disseminated,

awareness raising activities were undertaken and villages were asked to update their disaster management plans. Laputta did not face any danger this time but if high tide, together with heavy rain coincided with excessive water flow from upstream, or in case of tsunami, there would surely be high risk of flooding.

## Challenges

As for challenges, he mentioned the proper protocol for inviting township level representatives to an event like this workshop. They could attend only if the request was sent through either GAD main office at national level or through state/regional level. They could not independently accept invitations addressed directly to Township Disaster Management Committee. Another challenge was the absence of a specially assigned DRR unit the central level despites the GAD officials at township level being the chairs of township level disaster management committees. Lack of such structure made DRR work appeared like an add-on task. For GAD, they had their own duties and responsibilities on top of the DRR obligations. They had to chair a lot of committees but he acknowledged that there was weakness in assessing what had been done and what more needed to be done (including MAPDRR).

With support from JICA, three (3) early warning equipment (one at the office in Laputta town and the rest in two other villages) had been set up. But apart from these 3, nothing more had been done. And the equipment got switched on only when orders were received from above. In Laputta, official numbers of villages were four hundred and eighty-eight (488). Covering two villages, thus, did not mean much.

DMH had recently opened its township office in Laputta. Together with the presence of township office, easy access of weather information on networking sites like facebook was made possible. Unlike before, they (TDMC) could receive the information in a matter of 20 to 25 minutes. Though location specific information were still lacking, it had improved. In terms of warning dissemination, as soon as the township offices Learnt of the news (by fax), they used the phone network to further spread the information.

Despites the existence of plans, dissemination of warnings and completion of 81 storm shelters, there were still villages that had no place to go when disaster occurred. Another thing was the coordination. When shelters were built, many departments were involved in the process such as health, education, construction, etc. In 2008 after Nargis, in Pyin-sa-lu township, there was a directive to raise the foundations of buildings to at least five feet. However, whether this was followed or not was not known. In preparing budget for construction of shelters, every location was allocated the same amount of money. That should be amended to reflect the real situations and needs in a particular place.

When it came to simulations and exercises, all departments should have a system to regularly conduct such exercises. These activities could be part of the training courses and activities organized at the activity centers. Drills similar to the earthquake exercises conducted in Japanese schools should be adopted.

As discussed by the delegate from CSO, the increased involvement of local NGOs and CSOs would be very beneficial. He welcomes the engagement with these agencies, recognizing the strength of people based organizations. He also stressed the situation in Laputta where CSOs and political activism had intertwined and it was tough for government agencies to work with CSO with political agenda.

When it came to DRR, many departments were interconnected. Township GAD chaired the Township Disaster Management Committee and as discussed before, there were gaps and drawbacks because of its many roles. Effectiveness would be greater if more relevant departments were allowed to take the lead. It was heartening to hear of the plan from RRD to extend its reach and open up offices at the township level. As the principal agency for DRR, the presence of RRD and DMH at lower administrative levels would boost the implementation of DRR activities. Moreover, the dependence on GAD would ease and GAD itself would be able to perform its duties and responsibilities. These were the gaps from the point of view of a township level administrative officer.

LESSONS LEARNT WORKSHOP ON MYANMAR ACTION PLAN FOR DISASTER RISK REDUCTION (MAPDRR) IMPLEMENTATION

## 2.4.4. Reflections from Relief and Resettlement Department- Sittwe

Daw Nan Moe Nwe, Staff Officer from Relief and Resettlement Department, Sittwe, Rakhine Region, was the last presenter of the morning. Her presentation focused on the MAPDRR related works done in Rakhine from 2011 to 2015.Between 2011-2012 and 2015-2016financial year, twenty-four (24) training courses,



nine (9) workshops, four (4) simulation exercises and twelve (12) public talks were organized with core ministry budget as well as financial support from UN, INGOs and NGOs.

As for preparedness, two (2) cyclone shelters each were built in Pauk-taw and Myay-bone townships. In Sittwe, Kyauk-phyu, Myay-bone, Pauk-taw and Taung-gote townships, ten (10) cyclone shelters were constructed by the regional government. Together with JICA, SSB equipment were set up at RRD Rakhine regional office and Kyauk-phyu office for early warning system. In conclusion, she stated what to be done next in Rakhine region. It was planned that the central ministerial

office, RRD and Rakhine regional authorities together would organize more trainings, workshops and public talks.

## 2.5. Questions and Answers

Daw Khon Ra, Director from Irrigation and Water Utilization Department, shared the concerns of her department in filling the stocktaking form. The main DRR activities of the department were flood protection and flood reduction. However, in linking these activities to MAPDRR components and sub-components, there was no direct connection and they were not sure which component or sub-components their works were contributing to. Same difficulty was encountered in relation to flood mitigation structures such as dykes which were constructed based on the previous 20 to 30 years' meteorological data. During maintenance or when reviews were conducted after any breaches, considerations had to be made to change the design parameters such as how they can be strengthened or retrofitted according to changing climate and recent hazard patterns.

Another point she underlined was that in construction of embankments, there were guidelines to keep the heights at 5 feet. But before actual construction, authorized crest level was reviewed to determine the height according to the nature of flooding in particular locality. To capture these regular activities, she suggested inserting an infrastructure related component within MAPDRR. Presently, MAPDRR had portions devoted to construction and next to nothing regarding irrigation and water management. As the focus had been shifted from response to risk reduction, she urged the inclusion of infrastructure as well as design related matters in the revised MAPDRR.

U Hla Tun from DMH clarified the issue presented by U Toe Toe Tun from Laputta GAD with regards to the number of AWS stations. He pointed out that for 30 AWS installation, Laputta was one of the priority areas and its villages now had some equipment. It was true that the need was greater than what actually was able to provide at this point in time due to inadequate resources. International standards called for the presence of an equipment for every 5 km while in Myanmar, it was more like 50 km thus not as effective as it should be. He said if GAD officials were willing to operate some measuring equipment, DMH would be happy to help with capacity building.

U Win Htein Kyaw, Director from RRD, said that with support from JICA, altogether fifteen (15) SSBs were installed: at the main office in Nay Pyi Taw, in Ayeyarwaddy and in Rakhine regions. SSBs were extremely effective since they could function during the time of disasters when all communications failed. If nation-wide installation was to take place, it would have to be in more than 60,000 villages. Each individual SSB cost up to 7,700,000 kyats not including monthly operational fees. Therefore, from the financial point of view, it was not feasible. With support from external sources, however, there was plan to handle it in phase by phase manner with priorities assigned to most vulnerable areas and they were exploring the best ways to make it happen.

Rev. A. Bawi Thang from New Generation informed the participants that his organization was currently working in flood affected areas in Chin Region, mainly in supplying food and on children's issues. It was mentioned in previous presentation that considerable amount of money had been spent in the region. But in a village in Kalewa township, where over 140 houses were destroyed, some eighty (80) families were still living in temporary dwellings on the compound of the town official. He raised the question of what was being planned to do about it. He also expressed his concern over families whose houses had been destroyed by landslide in Hahka. But in relocating these people, only the government officials were given places to resettle triggering discontent and a thousand or so people demonstrated. He sought some clarification in that matter.

Daw Myat Moe Thwe of RRD responded by explaining that a portion of Presidential Reserve Fund had been provided to Chin region for housing, electricity and water supply. It was the responsibility of the regional authority to oversee the relocation and recovery related activities. She also touched upon the issue of insufficient coverage of flood related topics under MAPDRR. She mentioned about the realization of the Working Groups at the very last stage of MAPDRR development process on that gap and added one project on flood. She also emphasized the advantage of having MAPDRR: direct aids from the donors. Before, it was through international agencies that donors would approach the government for any kind of support. MAPDRR acted as a government proposal on what wanted done. At the DMTC, WFP had supported close to 200,000 USD worth of equipment and same went for EoC with support from USAID. Thus incorporating future activities of departments in MAPDRR could activate more direct external support. MAPDRR was not RRD's document. It belonged to everyone. MAPDRR could be an evidential support of what DRR activities were needed by all departments.

U Tun Aung Shein enquired about duration of trainings and workshops completed in Rakhine region and also about the selection of participants. Particularly on selection of participants, he drew attention to the need for training of trainers because in many cases, delegates from departments were sent to such courses for simple reason that they were the only ones free at that time. If villagers were to be trained, it had to take into account their missed economic opportunity for the time they were attending the training and should be compensated for that.

## 3. Group Discussions

For the group discussions, the group compositions followed the MAPDRR working group (given in Annex 5). One hour was given as discussion time and the working groups were provided with following five questions to guide their discussions.

- 1. To what extent MAPDRR contributed to advance the Thematic Area?
- 2. What opportunities do/ did MAPDRR offer?
- 3. What were the implementation challenges (technical/ financial / coordination, etc.)
- 4. What are the key positive features or gaps under MAPDRR based on your experience?
- 5. What are the recommendations in order to make MAPDRR more relevant?

### 3.1. Group Presentations

## 3.1.1. Working Group 1: Hazard, Vulnerability Assessment and Early Warning

U Hla Tun from DMH presented the outcomes of the Group 1.



## Extent of contribution of MAPDRR

The group agreed that 50 to 70% of regular activities of the members of Group 1 could be deemed contributing to MAPDRR.

## **Opportunities**

More exposure and greater opportunities were created to interact and work with other government departments, NGOs and CSOs. More external support and direct aids from donors were received due to MAPDRR.

## <u>Challenges</u>

- Inadequate technical know-how (lack of experiences);
- Scarce financial resources (DRR or disaster budget);
- Poor cooperation;
- Many departments had their regular activities to take care of and thus less attention was given to MAPDRR implementation;
- Lack of presence of certain departments at township and village levels; and
- Insufficient capacity building activities: more trainings, workshops and awareness raising activities to be organized.

## <u>Gaps</u>

- DRR works of certain departments did not match the MAPDRR sub-components. MAPDRR had strong linkages to RRD, DMH and GAD but weak in associating with other departments.
- Lead agency or agencies for each sub-component were not clearly labelled. For instance, under sub-component 5.9: Flood Mitigation Plan for Agricultural Sector, confusions arose because the activities planned under the sub-component belonged to more than one department.
- Strict rules of some departments could hinder the works of another and thus some compromises were called for. For example, instead of installing expensive SSBs for dissemination of warning, low cost i-com equipment could be distributed to villages. However, they were in violation with the communications' rules and the internal security concerns, making them unavailable. Thus some relaxations of rules and regulations might be required to find low-cost solution.

### Recommendations

- In selecting focal persons, to choose officers with the perspective of long stay in the department to ensure continuation. For states/regions and townships, the focal persons should be a native from that area familiar with and had ample knowledge of local customs and situations.
- To include a component that covered both structural and non-structural interventions.
- To include a component on flood protection and mitigation with special focus on infrastructure

development and maintenance as well as on waterway management.

• To include a component on a particular activity irrigation was planning: establishment of control center for early warning system at every dam site for flood control purposes.

3.1.2. Working Group 2: Policy, Institutional Arrangements, Preparedness and Response

Daw Khine Mon Mon Ei from RRD presented the results of the Group 2.

## Extent of contribution of MAPDRR

• Completed and on-going activities under the thematic area: enactment of disaster management law and rules, development of building codes, conduction of training courses (CBDRR, ToT) and public talks, construction of shelters and early warning system dissemination.

### **Opportunities**

- Support from international agencies financial and technical expertise,
- Chance to organize simulation exercises and awareness raising activities for the public;
- Increased cooperation and coordination between government departments, INGOs, NGOs and CSOs;
- Increased information and experience sharing.

### **Challenges**

- Weak high level advocacy;
- Inadequate public awareness raising and;
- Insufficient budget for MAPDRR implementation.

### Proposed solutions for gaps

- Clearer institutional responsibility;
- Selection of two focal persons from every department;
- Greater inter-departmental cooperation and also with external agencies;
- Collection and preparation of baseline data; and
- Improved coordination between government departments and CSOs and also between national and local authorities.

### **Recommendations**

- To seek national level endorsement.
- To enhance the participation of CSOs for MAPDRR review and revision.
- To deliberate on the improvement of MAPDRR within departments or ministries (increased linkages to ministerial and departmental plans).
- Wider dissemination of MAPDRR.





## 3.1.3. Working Group 3: Mainstreaming Disaster Risk Reduction into Development

Daw Khin Myo Lwin, Department of Human Resources and Educational Planning, Ministry of Education, made the presentation on behalf of Group 3.

## Extent of contribution of MAPDRR

MAPDRR could be used as sectoral and ministerial guide on DRR and helped in the direct implementation of (DRR) activities.

## **Opportunities**

- Improved coordination between agencies/ departments;
- MAPDRR as a reference for external organizations to determine where and how help could be rendered;
- Detailed activity description of MAPDRR could help avoid overlap between ministries and agencies;
- Cross-cutting nature of DRR motivated participation from all; and
- Through work or through specific trainings, capacities were built.

### **Challenges**

- Weak accountability by lead agencies possibility because one department got assigned as lead agency in many areas;
- Poor coordination;
- Poor M&E practices resulting in waning of interest as the time went by;
- Weak assignment of tasks; and
- Inadequate expertise (both hardware equipment and software knowledge).

### Gaps

- Insufficient inclusion of (needs and opinions of) most vulnerable groups;
- Weak linkage between Climate Change Adaptation (CCA) and DRR;
- Inadequate promotion of MAPDRR for departments to consider it as the main reference material for their efforts in DRR mainstreaming into development;
- Weak account of conducting national level simulation exercises and drills at regular intervals; and
- Insufficient description of lead ministry or department especially Health and Education (ministries that could reach down to the ground level).

### **Recommendations**

- To include M&E framework and measurable indicators (ensuring sustainability of the activities).
- To advocate MAPDRR as one of the key reference documents for departmental planning and to

advocate for better awareness of MAPDRR.

- To incorporate a component on conducting simulation exercises at all levels.
- To seek international collaborations.
- To include financing and budgeting scheme for all MAPDRR activities.
- To consider man-made disasters in the next version.
- To advocate for better awareness of MAPDRR

3.1.4. Working Group 4: Community Based Disaster Risk Management, Public Awareness, Education and Training

Daw Mya Thet Nwe from BBC-Media Action represented the Group 4. She started with the biggest challenge Group 4 faced: i.e. no one in the Group had ever read MAPDRR.

### Extent of contribution of MAPDRR



- Many agencies were implementing DRR activities on their own with no reference to MAPDRR. In Rakhine, for example, Ministry of Border Affairs had new school construction schemes that incorporated local hazard consideration.
- There were information dissemination by Ministry of Information, awareness raising activities by NGOs and CSOs, mitigation works, drills and livestock replacement programs by Ministry of Livestock and Fisheries. But they were doing it not with the intention of contributing to MAPDRR but just as part of their normal duties and responsibilities.

### **Opportunities**

The list of activities with respective government department as the lead served as a document base evidence to indicate who was doing what.

### Challenges and gaps

- MAPDRR detailed out its projects and activities, but many proposed lead agency did not know what they had to do.
- Weak coordination among and between government agencies and NGOs.
- MAPDRR was not user-friendly. Although the Plan described the lead ministry and agency, for those not familiar with the government structure they would not know which agency/ department to contact.
- In CBDRR sector, many agencies' unfamiliarity with TDMC (Township Disaster Management Committee) posed uncertainty. Activities under CBDRR component mentioned RRD as lead but lack of RRD representative offices at township and sub-township levels made it difficult for RRD to actually implement CBDRR related activities on the ground. Direct interaction with stakeholders thus was not achievable. Although GAD took on a lot of responsibilities at the township and sub-township

levels, they did not have DRR specific unit higher up; thus no subject focused specialists to provide guidance.

<u>Recommendations</u>

- To consider man-made disaster (especially IDPs caused by war).
- To contemplate the option of incorporating DRR awareness raising in the agenda of GAD monthly meeting (because representatives from village and village tract levels got invited).
- To add selection criteria for volunteers in capacity building (training) components. There was suggestion on including also evaluation of the effectiveness of trained volunteers.
- To consider raising awareness and conducting orientation training on MAPDRR for government departments at sub-national and lower levels, for NGOs and CSOs.
- To take into account livelihood development schemes along with microfinance or any financial support to be imparted at the community level.
- To conduct regular coordination meetings with regards to MAPDRR implementation with increased participation of CSOs.
- To give media a role in MAPDRR, to form partnership with government departments.

## 3.2. Questions and Answers

U Tun Aung Shein of Department of Agriculture raised two points: (1) DRR trainings – who would take the lead (central government or state/regional authority). He suggested to RRD to obtain proposals for such plan to decide which state or region would need the most or would be deemed the most suitable to take on such tasks. (2) Inclusion in MAPDRR on managing sand deposits or silting up of rivers and streams.

Representative from Sittwe, from Group 4, said that he had seen MAPDRR at an UNFCCC event but was not able to take it as it was only for display.

U Aung Ko Ko of BRAC suggested adding management information system in MAPDRR. During the last flood, information was unauthenticated and it was difficult to organize relief missions without reliable data. He also asked whether indicators would be included in MAPDRR. Without indicators it would just be a guide and could not be considered a roadmap.

Daw Khon Ra of Irrigation and Water Utilization Department discussed matters related to drought. Just as flood (construction of dykes and embankments, removal of silt and sand deposit, prevention of bank erosion, diversion of rivers and construction of channels, etc.), mitigation, adaptation and structural and non-structural measures for drought had also been undertaken. She repeated the request for inclusion of a



component on flood and drought measures, not just for Irrigation Department but for all departments involved on flood and drought protection and mitigation.

U Chit Min Htun from Plan International mooted the point on the production of a user-friendly version of MAPDRR for the public as it was useful for NGOs as a reference document in preparing DRR proposals. Dr. Khin Maung Win of CSO stressed the need for monitoring and evaluation mechanism.

U Tin Myint from Planning Department talked about planning and budgeting procedures. Planning Department, unlike many departments, was not an implementation agency. It reviewed plans developed by other departments. Particularly in development plans (component 5), the Department assured the incorporation of DRR considerations. The requested budget, compared against the available budget, was reviewed by three (3) committees set up by the previous central government and some cuts were applied. Here, Planning Department could step in as mediator to appeal for DRR related items: i.e. to convince the financial necessity of DRR measures. He contended that MAPDRR revision might either add or reduce more projects and encouraged all departments to express freely (in the revision process). He further endorsed the point brought up by Dr. Khin Maung Win and expressed his enthusiasm to participate in future MAPDRR related events.

## 3.3. Way Forward

The Consultant, Daw Hnin Nwe Win, thanked everyone for their active participation. If anything came into mind after this workshop, she urged everyone not to hesitate to contact her or any of UNDP colleagues to share their thoughts and recommendations.

The next step was to compile the outcomes from stocktaking exercise, bi-lateral meetings, group discussions and deliberations and carry out an analysis to draw out key recommendations for the revision of MAPDRR. This workshop was just the very first of many steps to be taken. Consultations with government departments, NGOs and CSOs would ensue. MAPDRR was a central level plan thus one single agency would not be able to make its revision happen.

One key example of what needed to be changed was the institutional arrangements of government agencies. Under the new government, some had been merged and some had been split up. This required thorough research and analysis. To be able to specifically name lead department for every activity/ sub-component, this would be needed.

In terms of indicators, it was not included from the beginning. However, many had validated its crucial role and in revising MAPDRR, this would be an essential consideration. Each and every suggestion and recommendations would be taken into account with no exception.

U Tun Aung Shein had two questions: how long would MAPDRR revision take and would MAPDRR be revised again when a new government took over (his assumption was that this MAPDRR revision process was undertaken because of the new government).

In response, Mr. Jaiganesh Murugesan, Programme Specialist from UNDP, explained the reason behind MAPDRR revision: because it expired in 2015 (2009-2015) which was aligned with the timeframe of HFA. The new Sendai Framework would guide DRR interventions worldwide up to 2030. What needed to be determined were how new MAPDRR was to be formulated and to what extent it should cover. Discussions were already moving along with RRD. First, there would be stocktaking of MAPDRR implementation and then there would be in-depth discussions with concerned authorities. It would take one more month for the analysis report to come out. How long the process would take depended on the departments and not solely on MSWRR because they were only facilitating the process. Since the main activities under MAPDRR would come from various departments, the duration of the process would depend on how much time the departments can spare to discuss these issues.

U Win Htein Kyaw confirmed the length of time required. He stressed the importance of such documents as Standing Order and MAPDRR. The revision of MAPDRR would be pushed as fast as possible and it was envisioned to finalize both the review and revision MAPDRR within 2016. To be able to say precisely when was not possible but it would be as soon as possible.

U Hla Tun of DMH added that disasters would not change with the change in government. For that reason, he did not believe any revision or alterations of MAPDRR would be required with every shift in governmental process.



The Consultant clarified that just as one year or five-year plan, MAPDRR would serve for certain set time period and would need revising once that was over.

Daw Myat Moe Thwe of RRD highlighted the need for departmental participation. She said if the departments and ministries had pre-prepared plans on what the department/ ministry envisaged to undertake or had a list of priorities ready beforehand, it would reduce the revision time considerably. Moreover, this would make MAPDRR more relevant to all agencies. In response to the second question, she emphasized that revising MAPDRR did not mean it would be new. It

was just to insert vital components in accordance with changing needs and hazard situations. For instance, before 2009 there was hardly any social disaster. But today it was felt rather widely and there might be a need to consider its inclusion when next version of MAPDRR was drafted.

Dr. San San Tint, Department of Technology Promotion and Coordination, Ministry of Science and Technology brought up additional points to ponder. As one of the members of ILO's Working Group on Eradication of Child Labour, she had participated in developing four to five-month work plan that entailed activities with specific dates. She enquired whether such short-term planning would be of use for MAPDRR.

Dr. Khin Maung Win restated his suggestion on the need for monitoring and evaluation mechanism that could ensure the timely execution of activities by concerned departments and agencies. Monitoring or review system to assess the progress at regular period (every 6 months or one year) had to be part of the plan.

## 4. Closing Remarks by Relief and Resettlement Department

U Win Htein Kyaw, Director from RRD delivered the closing remarks. He thanked everyone on behalf of RRD for energetically participating in the workshop. As stated this morning, MAPDRR was an action plan that laid out priority DRR actions to be taken. Throughout the implementation there was poor coordination among departments and it was recognized as one of the weaknesses. Nevertheless, it was not enough to just pinpoint the weaknesses, solutions to improve them would have to be found.



During the group discussion, he went around to all the groups and was happy to observe that all the members contributed enthusiastically. He came from health sector and he was not involved in MAPDRR development so he himself was not that familiar with the Plan. It was possible that some people at this workshop had never seen MAPDRR. But RRD, together with ADPC, UNDP and UN-Habitat, had printed and distributed MAPDRR to all ministries. If soft copies were requested, that request was also met. It was possible that it did not reach everyone or those involved before had not shared information and knowledge with the ones who came later. Hence, in future, it needed to explore ways to ensure MAPDRR was distributed and made aware more widely.

This was just the first step. Next, there would be advocacy meetings, consultation meetings and workshops and lots of reviews and revisions. In terms of time frame, it would be as soon as possible. However, in doing so, the process had to be in line with existing policies and directives. Guidance from senior officials was essential. Since they (he himself and his staffs) were not decision makers, consultations with relevant departments and agencies would be critical.

In conclusion, he again expressed appreciation towards all participants. He requested similar active participation and support in the upcoming reviews and revision of MAPDRR for the benefits of the country and its people.

Duration	Description
8.30 -9.00	Registration
9.00 - 9.30	Opening Session
	Opening Speech by MSWRR
	Remarks by UNDP, Chair of DRR WG
9.30 - 10.00	Coffee Break
10.00 - 10.20	Presentation on MAPDRR and its formulation
10.20 - 10.50	Findings from MAPDRR stocktaking exercise
10.50 - 11.05	Discussion
11.05 – 12.15	<ul> <li>Reflections from MAPDRR implementation by invited agencies (10 min each)</li> <li>RRD</li> <li>DMH</li> <li>GAD</li> </ul>
	<ul> <li>Representative from Townships (GAD-Laputta and RRD-Sittwe)</li> </ul>
12.15 - 12.30	Discussion
12.30 - 1.30	Lunch Break
1.30 - 1.40	Presentation on group discussion and its objectives
1.40 - 2.40	Group work – MAPDRR Working Group (4 Working Groups)
2.40 - 3.00	Coffee Break
3.00 - 4.00	Presentation from group work
4.00 - 4.30	Summary of group work and way forward
4.30 - 4.45	Closing Remarks by RRD

## Annex 1: Agenda of the Workshop

### Annex 2: Workshop Participants

### **Government Agencies**

No.	Name	Designation and Agency	E-mail
1.	Dr. Htoo Myint Swe	Medical Officer	htoomyintswe@gmail.com
		Department of Public	
		Health	
2.	Daw Soe Yu Sandar	Engineer	soeyu.sys@gmail.com
		Department of Higher	
		Education	
3.	U Kyaw Min Thein	Deputy Director	
		Department of Forest	
4.	Daw Phyu Ei	Deputy Director	
		Ministry of Border Affairs	
5.	Daw Win Theingi Tun	Deputy Staff Officer	
		Ministry of Border Affairs	
6.	Daw Nan Htike Aung	Staff Officer	yanaungmrtv2012@gmail.com
		MRTV	
7.	Dr. Khine Khine Yi	Assistant Director General	khineyimmr@gmail.com
		Livestock Breeding and	
		Veterinary Department	
8.	U Tin Myint	Deputy Director	
		Planning Department	
		Ministry of National	
		Planning and	
		Development	
9.	U Toe Toe Tun	Township Officer	
		General Administration	
		Department, Laputta	
10.	U Nyi Nyi Aung	Deputy Director General	
		General Administration	
		Department, Rakhine	
11.	U Zay Naw Win	Staff Officer	zaynaw662013@gmail.com
		GAD, Nay Pyi Taw	
12.	Daw Khin Myo Lwin	Assistant Director	khinmyolwindept@gmail.com
		Department of Human	
		Resources and	
		Educational Planning	
		Ministry of Education	
13.	U Kyaw Win Myint	Assistant Director	ukyawwinmyint82@gmail.com
		Department of Housing	
	LLA	Ministry of Construction	and a loss of an all some
14.	U Aung Thu Kyaw	Assistant Director	agthukyaw@gmail.com
		Environmental	
4.5		Conservation Department	hash da 102 @ an all
15.	U Tun Aung Shein	Deputy Director	hashein457@gmail.com
		Department of	
		Agriculture	
		Ministry of Agriculture,	
		Livestock and Irrigation	
16.	U Kyaw Myint Oo	Assistant Engineer	myintoo.kyaw@gmail.com

		Myanmar Post and	
		Telecommunication	
17.	Dr. Rosy Ne Win	Assistant Director	rosynewin@gmail.com
271	brinds, ne min	Ministry of Natural	
		Resource and	
		Environmental	
		Conservation	
18.	U Tai Myint Aung	Director	
20.	o rannymeriang	Department of Building	
		Ministry of Construction	
19.	U Nay Myo Win	Staff Officer	dzdg.npt.moecaf@gmail.com
	,,	Dry Zone Greening	
		Department	
20.	U Kyaw Naing	Deputy Director	k.naing07@gmail.com
		Fire Services Department	
21.	Dr. Myo Min Tun	Assistant Director	mmt.myomin@gmail.com
		Department of Social	
		Welfare	
22.	U Hla Tun	Deputy Director	haltunmr@gmai.com
		Department of	
		Meteorology and	
		Hydrology	
23.	U Aung Zay Hlaing	Assistant Director	
		Department of Rural	
		Development	
24.	U Wunna	Deputy Director	wunna369@gmail.com
		Ministry of Construction	
25.	U Aung Nay Phyo	Assistant Director	anphyo200@gmai.com
		Department of Housing	
		Development	
		Ministry of Construction	
26.	Dr. San San Tint	Director	dr.sansantint@gmail.com
		Department of	
		Technology Promotion	
		and Coordination	
		Ministry of Science and	
		Technology	
27.	Daw Khon Ra	Director	khonra.irr@gmail.com
		Irrigation and Water	
		Utilization	
28.	U Myo Min	Deputy Director	
		Ministry of Agriculture,	
		Livestock and Irrigation	
29.	U Win Htut Oo	Deputy Director General	
		Relief and Resettlement	
		Department	
30.	U Aung Kyaw	Assistant Director General	
		Relief and Resettlement	
		Department	
31.	U Win Htein Kyaw	Director	winhteinkyaw.rrdmyanmar@gmail.com
		Relief and Resettlement	
		Department	

32.	Dr. Min Thein	Director	
		Relief and Resettlement	
		Department	
33.	Daw Myat Moe Thwe	Director	
		Relief and Resettlement	
		Department	
34.	Daw Win Ohnmar	Deputy Director	wohnmar7@gmail.com
		Relief and Resettlement	
		Department	
35.	Daw Su SuTun	Deputy Director	susutun.sst@gmail.com
		Relief and Resettlement	
		Department	
36.	Daw Khine Mon Mon	Assistant Director	
	Ei	Relief and Resettlement	
		Department	
37.	Daw Nan Moe Nwe	Staff Officer	
		Relief and Resettlement	
		Department	
38.	Daw Nyo Mee Swe	Staff Officer	skymoonpeacefullife@gmail.com
		Relief and Resettlement	
		Department	
39.	Daw Sun	Staff Officer	sunandarmyint@gmail.com
	NandarMyint	Relief and Resettlement	
		Department	
40.	Daw Thet Thet Aye	Staff Officer	
		Relief and Resettlement	
		Department	
41.	U Aung Zaw Oo	Staff Officer	
		Relief and Resettlement	
		Department	
42.	Daw Win Pa Pa Kyaw	Assistant Staff Officer	
		Relief and Resettlement	
		Department	
43.	Daw Ei Khaing San	Junior Staff Officer	yolay16@gmail.com
		Relief and Resettlement	
		Department	
44.	Daw Ei Shwe Sin Win	Junior Staff Officer	
		Relief and Resettlement	
		Department	
45.	Daw Ni Ni Win	Relief and Resettlement	
		Department	

### Non-Government Agencies

No.	Name	Designation and Agency	E-mail
1.	Daw Su Ei Nandar	M&E Officer	suei-nandar@actionaid.org
		Action Aid Myanmar	
2.	U Aung Kyaw Soe	Project Coordinator	Aung-Soe@actionaid.org
		Action Aid Myanmar	
3.	U Phone Naing	Project Manager	yangon.pm@acted.org
		ACTED	
4.	Dr. Mel Capistrano	Advisor, Capacity Building	
		ADPC	
5.	Than Than Myint	Programme Officer	
		ADPC	
6.	U Myat Noe Aung	Communication Officer	myatnoeaung.eleven@gmail.com
		AGE	
7.	Clare Lyons	Senior Trainer	Clare.lyons@bbcmediaaction.org
		BBC Media Action	
8.	Daw Mya Thet Nwe	Programme Manager	myathet.nwe@bbcmediaction.org
		BBC Media Action	
9.	U Aung Ko Ko	Emergency Response	aung.koko@brac.net
		Coordinator	
		BRAC	
10.	U Nyar Na	Project Manager	nyarna.linn@gmail.com
		CDA	
11.	Dr. Khin Maung Win	President	drkhinmwin@gmail.com
		CDA MCDRR	
12.	U Ohn Hlaing	Chairman	ohnhlaings@gmail.com
12	De While Manage Miles	CHSS	
13.	Dr. Khin Maung Win	CSO	Liber all the second second second
14.	Daw Thida Aye	Assistant Director	khoo.thidaaye@gmailcom
10	DawThidallhus	CSO	thidehture@emeil.com
15.	DawThidaHtwe	Assistant Director CSO	thidahtwe@gmail.com
16	Daw San Vin Tint		samulatint@gmail.com
16.	Daw San Yin Tint	Vice Chairperson Compass	sanvintint@gmail.com
17.	Mr. Andrea Berloffa	Emergency Coordinator	andrea.berloffa@fao.org
1/.	IVIT. Alfurea berioria	FAO	anurea.perioria@iau.org
18.	Mr. Khalid Khan	FSS Coordinator	Khalid.KhanKhatki@fao.org
10.		FAO	Khand, KhankhatKh@Tao.org
19.	Daw Thin Ohnmar Soe	Chairman	thinohmarsoe@gmail.com
±	Daw Hini Olimita Soc	Future World	Children and a socie ginalicom
20.	U Sai Htin Kyaw	KDWA	saihtinkyaw2007@gmail.com
20.	o surrain ayaw	G.S	Sulfainty an ECOT C Amon Com
21.	Naw Sabi Lar	Project Coordinator	jennyhoward121d@gmail.com
		Karen Baptist Church	Istriftio Har Sale 2 & Kitan Son
22.	U Nay Lin Soe	Field Assistant	
		Lanthit	
23.	Daw Khin Win	Program Manager	khinwinmcdrr@gmail.com
		Myanmar Consortium for	
		Disaster Risk Reduction	
24.	Daw Aye Aye San	Managing Director	
		MTM	

25.	Dr. Myo Min Tun	Vice President MPSWA	cec.mpswa@gmail.com
26.	Rev. A. Bawi Thang	Director New Generation	abrahamthang2008@gmail.com
27.	U Chit Min Htun	Resilience Specialist Plan International	Chitmin.Htwe@plan- international.org
28.	U Win Thein	Secretary SSO	maungwt2009@gmai.com
29.	Ms. SreejaS. Nair	Coordinator MCCDDM, UN-Habitat	sreya.nair@unhabitat.org.mm
30.	U Thein Zaw Win	Capacity Development Officer UN-HABITAT	
31.	Daw Yati Oo	Programme Associate UN-HABITAT	yatioounhabitat@gmail.com
32.	Ms. Marianne Mosberg	DRR Officer UNICEF	mmosberg@unicef.org
33.	Daw Lat Lat Aye	Team Leader UNDP	lat.lat.aye@undo.org
34.	Mr. Jaigansh Murugesan	Programme Specialist UNDP	jaiganesh.murugesan@undp.org
35.	U Sai Phong Kham	Program Analyst UNDP	sai.phong.kham@undp.org
36.	Win Sandar Htwe	Project Assistant UNDP	win.sandar.htwe@undp.org
37.	Daw Hnin Nwe Win	Consultant UNDP	mahnin71@gmail.com

No.	Ministry	Department	
1.	Ministry of Social Welfare, Relief and	Relief and Resettlement Department	
2.	Resettlement	Fire Services Department	
3.		Department of Social Welfare	
4.	Ministry of Agriculture and Irrigation	Myanmar Agriculture Services	
5.		Department of Irrigation	
6.		Department of Agriculture Planning	
7.	Ministry of Environmental Conservation and	National Commission for Environmental Affairs	
8.	Forestry	Department of Forest	
9.		Planning and Statistics Department	
10.	Ministry of Home Affairs	General Administration Department	
11.	Ministry of Transport	Department of Meteorology and Hydrology	
12.	Ministry of Health	Department of Health	
13.	Ministry of Livestock Breeding and Fisheries	Livestock Breeding and Veterinary Department	
14.	Ministry of Education	Department of Education Planning and Training	
15.	Ministry of National Planning and Economic Development	Department of Planning	
16.	Ministry of Information	Myanma Radio and Television	
17.	Ministry of Construction	Public Works	
18.	Ministry of Communications, Posts and Telegraphs	Myanmar Posts and Telecommunications	
19.	Office for the Coordination of Humanitarian Affairs (OCHA)		
20.	United Nations Development Programme (UNDP)		
21.	Myanmar Red Cross Society (MRCS)		
22.	Myanmar Engineering Society (MES)		
23.	Myanmar Geoscience Society (MGS)		
24.	Asian Disaster Preparedness Center (ADPC)		
25.	UN-Habitat		
	Association of Southeast Asian Nations (ASEAN) (observer)		

#### Annex 3: Members of MAPDRR Taskforce (2009-2015)

Working Group	Thematic Focus	Membership
Working	Hazard, Vulnerability	Department of Meteorology and Hydrology
Group 1	Assessment and Early	Department of Forest
	Warning	Myanmar Posts and Telecommunications
		Ministry of Information
	(MAPDRR components 2	Ministry of Science and Technology
	and 3)	Irrigation Department
		General Administration Department
		Myanmar Engineering Society
		Myanmar Geoscience Society
Working	Policy, Institutional	Relief and Resettlement Department
Group 2	Arrangements,	Fire Services Department
	Preparedness and Response	Department of Health
		General Administration Department
	(MAPDRR components 1	UNOCHA
	and 4)	Myanmar Red Cross Society (MRCS)
		ASEAN Secretariat
Working	Mainstreaming Disaster Risk	Department of Planning
Group 3	Reduction into Development	Ministry of Construction
		Myanmar Agricultural Services
	(MAPDRR component 5)	Ministry of Education
		National Commission on Environmental Affairs
		Myanmar Posts and Telecommunications
Working	Community Based Disaster	Ministry of Education
Group 4	Risk Management, Public	Ministry of Social Welfare, Relief and Resettlement
	Awareness, Education and	Livestock Breeding and Veterinary Department
	Training	Department of Health
		Ministry of Information
	(MAPDRR components 6	Ministry of Science and Technology
	and 7)	UNDP
		Myanmar Red Cross Society (MRCS)

### Annex 4: MAPDRR Working Group (2009-2015)

Working Group 1	Working Group 2	Working Group 3	Working Group 4
<ul> <li>Forestry Department</li> <li>GAD-Laputta</li> <li>Myanmar Posts and Telecommunications</li> <li>RRD-Bago</li> <li>DMH</li> <li>Ministry of Science and Technology</li> <li>Irrigation &amp; Water Utilization Department</li> </ul>	<ul> <li>GAD-Nay Pyi Taw</li> <li>RRD-Nay Pyi Taw</li> <li>Dry Zone Greening Department</li> <li>Fire Services Department</li> <li>Department of Border Affairs</li> </ul>	<ul> <li>Environmental Conservation Department</li> <li>RRD-Pathein</li> <li>MOECAF</li> <li>MNPED</li> <li>Department of Agriculture</li> <li>Department of Human Resources and Educational Planning</li> <li>Department of Housing</li> <li>Department of Building</li> <li>Department of Housing</li> <li>Department of Housing</li> <li>Department of Housing</li> <li>Department of Housing</li> <li>Department of Housing</li> </ul>	<ul> <li>Department of Border Affairs</li> <li>MRTV</li> <li>GAD-Sittwe</li> <li>Ministry of Health</li> <li>RRD-Sittwe</li> <li>DRD</li> <li>Department of Social Welfare</li> <li>DHE</li> <li>Livestock Breeding and Veterinary</li> <li>Department</li> </ul>
<ul> <li>BBC-Media Action</li> <li>CDA</li> <li>UNDP</li> <li>Action Aid</li> <li>MPSWA</li> </ul>	<ul> <li>ADPC</li> <li>ActionAid</li> <li>CDA</li> <li>CSO</li> <li>UNHABITAT</li> <li>FAO</li> <li>UNDP</li> </ul>	<ul> <li>ADPC</li> <li>CSO</li> <li>UNICEF</li> <li>FAO</li> <li>UNDP</li> <li>Plan</li> <li>ACTED</li> </ul>	<ul> <li>Plan</li> <li>CDA</li> <li>Compass</li> <li>Future World</li> <li>Myanmar Consortium for Disaster Risk Reduction</li> <li>SSO</li> <li>BRAC</li> <li>Karen Baptist Church</li> <li>CHSS</li> <li>MTM</li> <li>Lanthit</li> <li>BBC-Media Action</li> <li>AGE</li> <li>KDWA</li> </ul>

### Annex5: Composition of Groups for Discussion Session







Collaboration with

